

IN THE CLAIMS

1. (Currently amended) An anticancer composition comprising a therapeutically effective amount of proteoglycan extract from Spirulina with or without a pharmaceutically acceptable carrier, wherein the proteoglycan extract from Spirulina is prepared by the following steps of:

a) dissolving a dry powdered Spirulina in 5-20 times water by weight and breaking the Spirulina cell walls;

b) heating a solution obtained from step a) at 60°-100°C, and cooling the heated solution to separate a liquid phase from the solution;

c) adjusting pH of said liquid phase to ~~less than 7~~ 3.8-4.2, and filtering said liquid phase to obtain a filtrate; and

d) adjusting the filtrate to pH 7, and concentrating the filtrate.

2. (Cancelled).

3. (Previously amended) The composition according to claim 1, wherein said water in step a) is 8-15 times by weight of said dry powdered Spirulina.

4. (Previously amended) The composition according to claim 3, wherein said water in step a) is 10 times by weight of said dry powdered Spirulina.

5. (Original) The composition according to claim 1, wherein said step b) is conducted at a temperature of 80°C-95°C.

6. (Original) The composition according to claim 5, wherein said step b) is conducted at a temperature of 90°C.

7. (Cancelled)

8. (Currently amended) A hemogram-improving composition comprising a therapeutically effective amount of proteoglycan extract from Spirulina with or without a pharmaceutically acceptable carrier, wherein the proteoglycan extract from Spirulina is prepared by the following steps of:

a) dissolving a dry powdered Spirulina in 5-20 times water by weight, and breaking the Spirulina cell walls;

b) heating a solution obtained from step a) at 60°-100°C, and cooling the heated solution to separate a liquid phase from the solution;

c) adjusting pH of said liquid phase to ~~less than 7~~ 3.8-4.2, and filtering said liquid phase to obtain a filtrate; and

d) adjusting the filtrate to pH 7, and concentrating the filtrate.

9. (Cancelled)

10. (Previously amended) The composition according to claim 8, wherein said water in step a) is 8-15 times by weight of said dry powdered Spirulina.

11. (Previously amended) The composition according to claim 10, wherein said water in step a) is 10 times by weight of said dry powdered Spirulina.

12. (Original) The composition according to claim 8, wherein said step b) is conducted at a temperature of 80°C-95°C.

13. (Original) The composition according to claim 12 wherein said step b) is conducted at a temperature of 90°C.

14. (Cancelled)

15. (Currently amended) An anti-irradiation composition comprising a therapeutically effective amount of proteoglycan extract from Spirulina with or without a pharmaceutically acceptable carrier, wherein the proteoglycan extract from Spirulina is prepared by the following steps of:

a) dissolving a dry powdered Spirulina in 5-20 times water by weight, and breaking the Spirulina cell walls;

b) heating a solution obtained from step a) at 60°-100°C, and cooling the heated solution to separate a liquid phase from the solution;

c) adjusting pH of said liquid phase to ~~less than 7~~ 3.8-4.2, and filtering said liquid phase to obtain a filtrate; and

d) adjusting the filtrate to pH 7, and concentrating the filtrate.

16. (Cancelled)

17. (Previously amended) The composition according to claim 15, wherein said water in step a) is 8-15 times by weight of said dry powdered Spirulina.

18. (Previously amended) The composition according to claim 17, wherein said water in step a) is 10 times by weight of said dry powdered Spirulina.

19. (Original) The composition according to claim 15, wherein said step b) is conducted at a temperature of 80°C-95°C.

20. (Original) The composition according to claim 19, wherein said step b) is conducted at a temperature of 90°C.

21. (Cancelled)

22. (Currently amended) A DNA-repairing composition comprising a therapeutically effective amount of proteoglycan extract from Spirulina with or without a pharmaceutically acceptable carrier, wherein the proteoglycan extract from Spirulina is prepared by the following steps of:

a) dissolving a dry powdered Spirulina in 5-20 times water by weight, and breaking the Spirulina cell walls;

b) heating a solution obtained from step a) at 60°-100°C, and cooling the heated solution to separate a liquid phase from the solution;

c) adjusting pH of said liquid phase to ~~less than 7~~ 3.8-4.2, and filtering said liquid phase to obtain a filtrate; and

d) adjusting the filtrate to pH 7, and concentrating the filtrate.

23. (Cancelled)

24. (Previously amended) The composition according to claim 22, wherein said water in step a) is 8-15 times by weight of said dry powdered Spirulina.

25. (Previously amended) The composition according to claim 24, wherein said water in step a) is 10 times by weight of said dry powdered Spirulina.

26. (Original) The composition according to claim 22, wherein said step b) is conducted at a temperature of 80°C-95°C.

27. (Original) The composition according to claim 26, wherein said step b) is conducted at a temperature of 90°C.

28. (Cancelled)

29. (Currently amended) An antiviral composition comprising a therapeutically effective amount of proteoglycan extract from Spirulina with or without a pharmaceutically acceptable carrier, wherein the proteoglycan extract from Spirulina is prepared by the following steps of:

a) dissolving a dry powdered Spirulina in 5-20 times water by weight, and breaking the Spirulina cell walls;

b) heating a solution obtained from step a) at 60°-100°C, and cooling the heated solution to separate a liquid phase from the solution;

c) adjusting pH of said liquid phase to ~~less than 7~~ 3.8-4.2, and filtering said liquid phase to obtain a filtrate; and

d) adjusting the filtrate to pH 7, concentrating, and drying if necessary.

30. (Cancelled)

31. (Previously amended) The composition according to claim 29, wherein said water in step a) is 8-15 times by weight of said dry powdered Spirulina.

32. (Previously amended) The composition according to claim 31, wherein said water in step a) is 10 times by weight of said dry powdered Spirulina.

33. (Original) The composition according to claim 29, wherein said step b) is conducted at a temperature of 80°C-95°C.

34. (Original) The composition according to claim 33, wherein said step b) is conducted at a temperature of 90°C.

35. (Cancelled)

36 (Currently amended) An immunoenhancing composition comprising a therapeutically effective amount of proteoglycan extract from Spirulina with or without a pharmaceutically acceptable carrier, wherein the proteoglycan extract from Spirulina is prepared by the following steps of:

a) dissolving a dry powdered Spirulina in 5-20 times water by weight; and breaking the Spirulina cell walls;

b) heating a solution obtained from step a) at 60°-100°C, and cooling the heated solution to separate a liquid phase from the solution;

c) adjusting pH of said liquid phase to ~~less than 7~~ 3.8-4.2, and filtering said liquid phase to obtain a filtrate; and

d) adjusting the filtrate to pH 7, and concentrating the filtrate.

37. (Cancelled)

38. (Previously amended) The composition according to claim 36, wherein said water in step a) is 8-15 times by weight of said dry powdered Spirulina.

39. (Previously amended) The composition according to claim 38, wherein said water in step a) is 10 times by weight of said dry powdered Spirulina.

40. (Original) The composition according to claim 36, wherein said step b) is conducted at a temperature of 80°C-95°C.

41. (Original) The composition according to claim 40, wherein said step b) is conducted at a temperature of 90°C.

42. (Cancelled)

43. (Currently amended) A dendrite-like-cell-activating composition comprising a therapeutically effective amount of proteoglycan extract from Spirulina with or without a pharmaceutically acceptable carrier, wherein the proteoglycan extract from Spirulina is prepared by the following steps of

a) dissolving a dry powdered Spirulina in 5-20 times water by weight, and breaking the Spirulina cell walls;

b) heating a solution obtained from step a) at 60°-100°C, and cooling the heated solution to separate a liquid phase from the solution;

c) adjusting pH of said liquid phase to ~~less than 7~~ 3.8-4.2, and filtering said liquid phase to obtain a filtrate; and

d) adjusting the filtrate to pH 7, and concentrating the filtrate.

44. (Cancelled)

45. (Previously amended) The composition according to claim 43, wherein said water in step a) is 8-15 times by weight of said dry powdered Spirulina.

46. (Previously amended) The composition according to claim 45, wherein said water in step a) is 10 times by weight of said dry powdered Spirulina.

47. (Previously amended) The composition according to claim 43, wherein said step b) is conducted at a temperature of 80°C-95°C.

48. (Previously amended) The composition according to claim 47, wherein said step b) is conducted at a temperature of 90°C.

49. (Cancelled)

50. (Currently amended) A process for preparing a proteoglycan extract from Spirulina, including the following steps of:

a) dissolving a dry powdered Spirulina in 5-20 times water by weight and breaking the Spirulina cell walls;

b) heating a solution obtained from step a) at 60°- 00°C, and cooling the heated solution to separate a liquid phase from the solution;

c) adjusting pH of said liquid phase to ~~less than 7~~ 3.8-4.2, and filtering said liquid phase to obtain a filtrate; and

d) adjusting the filtrate to pH 7, and concentrating the filtrate.

51. (Cancelled)

52. (Previously amended) The process according to claim 50, wherein said water in step a) is 8-15 times weight of said dry powdered Spirulina.

53. (Previously amended) The process according to claim 52, wherein said water in step a) is 10 times by weight of said dry powdered Spirulina.

54. (Original) The process according to claim 50, wherein said step b) is conducted at a temperature of 80°C-95°C.

55. (Previously amended) The process according to claim 54, wherein said step b) is conducted at a temperature of 90°C.

56. (Cancelled)

57. (Currently amended) A composition comprising a proteoglycan extract from Spirulina with or without a pharmaceutically acceptable carrier, wherein the proteoglycan extract from Spirulina is prepared by the following steps of:

a) dissolving a dry powdered Spirulina in 5-20 times water by weight, and breaking the Spirulina cell walls;

b) heating a solution obtained from step a) at 60°-100°C, and cooling the heated solution to separate a liquid phase from the solution;

c) adjusting pH of said liquid phase to ~~less than 7~~ 3.8-4.2, and filtering said liquid phase to obtain a filtrate; and

d) adjusting the filtrate to pH 7, and concentrating the filtrate.

58. (Previously added) The composition according to claim 57, wherein said water in step a) is 8-15 times by weight of said dry powdered Spirulina.

59. (Previously added) The composition according to claim 58, wherein said water in step a) is 10 times by weight of said dry powdered Spirulina.

60. (Previously added) The composition according to claim 57, wherein said step b) is conducted at a temperature of 80°C-95°C.

61. (Previously added) The composition according to claim 60, wherein said step b) is conducted at a temperature of 90°C.

62. (Cancelled)

63. (Previously added) The composition according to claim 57, wherein step d) further comprises drying the filtrate.

64. (Previously added) The composition according to claim 1, wherein step d) further comprises drying the filtrate.

65. (Previously added) The composition according to claim 8, wherein step d) further comprises drying the filtrate.

66. (Previously added) The composition according to claim 15, wherein step d) further comprises drying the filtrate.

67. (Previously added) The composition according to claim 22, wherein step d) further comprises drying the filtrate.

68. (Previously added) The composition according to claim 29, wherein step d) further comprises drying the filtrate.

69. (Previously added) The composition according to claim 36, wherein step d) further comprises drying the filtrate.

70. (Previously added) The composition according to claim 43, wherein step d) further comprises drying the filtrate.

71. (Currently amended) The ~~composition~~ process according to claim 50, wherein step d) further comprises drying the filtrate.